

SERIAL NO. 10/756,799

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Alexander E. Smith et al.	Docket No.: RANN-0017 RPBPC REF: RANN-0017
Serial Number: 10/756,799	Art Unit: 3662
Filing Date: January 14, 2004	Examiner: PHAN, DAO LINDA
Title: Minimum Safe Altitude Warning	

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(c)(2)

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Transmitted herewith is an Information Disclosure Statement (Form PTO-1449) in the above-captioned application along with copies of the references cited.

This Information Disclosure Statement is submitted after three months from the filing date of the above-identified U.S. National Patent application, or after three months from date of entry into the U.S. National Stage of the International Application that has been assigned the above-identified U.S. Patent application number, whichever applies and after the mailing date of the first Office Action on the merits of the above-identified application, but prior to issuance of the earlier of any Final Action or Notice of Allowance sent in such application.

Applicant has submitted these references to comply with the duty of disclosure in the above-patented application. However, submission of these references is not to be construed as an admission by applicant that these references are Prior Art *per se*. In particular, applicant reserves the right to swear behind applicable references where possible and permissible.

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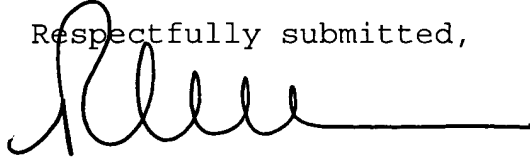
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SERIAL NO. 10/756,799

PATENT

The fee required under 37 C.F.R. § 1.97(c) and § 1.17(p) of \$180 is submitted herewith. The Commissioner is authorized to charge any additional fees or credit any overcharges to Deposit Account No. 50-1393. Consideration of the references and Examination on the Merits is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. Bell', followed by a horizontal line extending to the right.

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Registration Number 34,546

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(703) 768-0340

September 12, 2005

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FORM PTO-1449 (MODIFIED)

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

In re Application of:
Alexander E. Smith et al.Docket No.: RANN-0017
RPB REF: RANN-0017

Serial Number: 10/756,799

Art Unit: 3662

Filing Date: January 14, 2004

Examiner: PHAN, DAO LINDA

Title: **MINIMUM SAFE ALTITUDE WARNING****U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	01	5,528,244	06/18/96	Schwab	342	37	03/31/95
	02	4,454,510	06/12/84	Crow	343	5	02/23/81
	03	5,191,342	03/02/93	Alsup et al.	342	465	08/06/81
	04	4,196,474	04/01/80	Buchanan et al.	364	461	02/11/74
	05	5,627,546	05/06/97	Crow	342	352	09/05/95
	06	5,774,829	06/30/98	Cisneros et al.	701	213	12/12/95
	07	5,365,516	11/15/94	Jandrell	370	18	08/16/91
	08	5,570,095	10/29/96	Drouilhet Jr. et al.	342	357	04/01/94
	09	4,524,931	06/25/85	Nilsson	246	167	11/09/81
	10	4,688,046	08/18/87	Schwab	342	456	12/13/82
	11	5,680,140	10/21/97	Loomis	342	357	02/26/96
	12	6,049,304	04/11/00	Rudel et al.	342	357.08	07/10/97
	13	5,999,116	12/7/99	Evers	342	36	07/14/98
	14	6,094,169	07/25/00	Smith et al.	342	465	12/11/98
	15	6,085,150	07/04/00	Henry et al.	701	301	07/22/97
	16	4,229,737	10/21/80	Heldwein et al.	343	6R	10/21/80
	17	5,596,332	01/21/97	Coles et al.	342	455	05/22/96
	18	5,781,150	07/14/98	Norris	342	357	10/13/95
	19	6,448,929	09/10/02	Smith et al.	342	456	09/17/01
	20	5,262,784	11/16/93	Drobnicki et al.	342	45	06/15/92
	21	5,374,932	12/20/94	Wyschogrod et al.	342	36	08/02/93
	22	5,596,326	01/21/97	Fitts	342	30	07/17/95
EXAMINER				DATE CONSIDERED			

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. (Information Disclosure Statement - Section 9 PTO-1449) (page 1 of 7)

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RPB REF: **RANN-0017**Serial Number: **10/756,799**Art Unit: **3662**Filing Date: **January 14, 2004**Examiner: **PHAN, DAO LINDA**Title: **MINIMUM SAFE ALTITUDE WARNING****U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	23	5,867,804	02/02/99	Pilley et al.	701	120	09/06/95
	24	5,144,315	09/01/92	Schwab et al.	342	49	12/10/90
	25	5,714,948	02/03/98	Farmakis et al.	340	961	04/16/96
	26	5,402,116	03/28/95	Ashley	340	870.1	04/28/92
	27	4,782,450	11/01/88	Flax	364	461	08/27/85
	28	3,705,404	12/05/72	Chisholm	343	112R	11/17/69
	29	6,211,811	04/03/01	Evers	342	36	11/03/99
	30	6,384,783	05/07/02	Smith et al.	342	387	12/21/99
	31	6,314,363	11/06/01	Pilley et al.	701	120	06/20/00
	32	5,629,691	05/13/97	Jain	340	961	05/26/95
	33	4,914,733	04/03/90	Gralnick	340	961	10/30/87
	34	6,133,867	10/17/00	Eberwine et al.	342	29	12/28/98
	35	4,167,006	09/04/79	Funatsu et al.	343	6.5 LC	09/04/79
	36	5,153,836	10/06/02	Fraughton et al.	364	461	08/22/90
	37	2002/0009267	01/09/03	Dunsky et al.	701	4	05/01/02
	38	6,292,721	09/18/01	Conner et al.	701	9	06/12/98
	39	6,219,592	04/17/01	Muller et al.	701	9	05/08/98
	40	6,347,263	01/12/02	Johnson et al.	701	14	10/15/99
	41	6,380,870	04/30/02	Conner et al.	340	970	02/01/00
	42	6,445,310	09/03/02	Bateman et al.	340	970	02/01/00
	43	6,477,449	11/05/02	Conner et al.	701	4	02/01/00
	44	6,571,155	05/27/03	Carriker at al.	701	3	07/02/01
EXAMINER				DATE CONSIDERED			

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EXAMINER INITIAL	#	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	45	6,606,034	09/12/03	Muller et al.	340	970	07/31/95
	46	6,469,664	10/22/02	Michaelson et al.	342	357.13	06/26/00
	47	5,454,720	10/03/95	FitzGerald et al.	434	27	05/21/94
	48	6,633,259	10/2003	Smith et al.	342	456	
	49	10020021247	02/2002	Smith et al.	342	450	
	50	3,668,403	06/1972	Meilander	701	121	
	51	5,381,140	01/1995	Kuroda et al.	340	961	
	52	5,752,216	05/1998	Carlson et al.	701	120	
	53	4,359,733	11/1982	O'Neill	342	36	
	54	5,075,694	12/1991	Donnangelo et al.	342	455	
	55	5,268,698	12/1993	Smith et al.	342	450	
	56	6,463,383	10/2002	Baiada et al.	701	120	
	57	6,789,011	09/2004	Baiada et al.	701	120	
	58	6,873,903	03/2005	Baiada et al.	701	120	
	59	2004/0225432	11/2004	Pilley et al.	701	117	
	60	4,224,669	09/1980	Brame	701	8	
	61	4,646,244	02/1987	Bateman	701	301	
	62	5,506,590	04/1996	Minter	342	462	
	63	3,792,472	02/1974	Payne et al.	342	32	
	64	5,260,702	11/1993	Thompson	340	970	
EXAMINER				DATE CONSIDERED			

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	#	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	65	5,283,574	02/1994	Grove	340	970	
	66	5,317,316	05/1994	Sturm et al.	342	30	
	67	5,506,590	04/1996	Minter	342	462	
	68	5,666,110	09/1997	Paterson	340	970	
	69	6,208,284	03/2001	Woodell et al.	342	30	
	70	6,445,310	09/2002	Bateman et al	340	970	
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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATED Y N
	F01	JP 9-119983A	11/27/96	JAPAN			ABST
	F02	JP 8-146130A	5/29/96	JAPAN			ABST
	F03	JP 6-342061A	12/13/94	JAPAN			ABST
	F04	JP 9-288175A	11/04/94	JAPAN			ABST
	F05						
	F06						
	F07						

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Examiner: **PHAN, DAO LINDA**

Title: **MINIMUM SAFE ALTITUDE WARNING**

OTHER ART (including Author, Title, Pertinent Pages, etc.)

A01	TRAFFIC ALERT SYSTEM TECHNICAL DESIGN SUMMARY, Final Report, April 1994 (Baldwin et al.)
A02	AIRSCENE, The complete Air Traffic Picture in Real Time, www.airscene.com, Rannoch Corporation, Alexandria, Virginia, undated.
A03	GPS Relative Accuracy for Collision Avoidance, Institute of Navigation Technical Meeting, January 1997 (Rudel et al.)
A04	Cassell, R., Smith A., Cohen, B., Yang, E., Sleep, B., A Prototype Aircraft Performance Risk Assessment Model, Final Report, Rannoch Corporation, February 28, 2002.
A05	Cassell, R., Smith A., Cohen, B., Yang, E., Sleep, B., Esche, J., Aircraft Performance Risk Assessment Model (APRAM), Rannoch Corporation, November 30, 2002.
A06	Cox, E., A., Fuzzy Logic For Business and Industry, Charles River Media, 1995, Chapter 5.
A07	Smith, A., Cassell, R., Cohen, B., An approach to Aircraft Performance Risk Assessment Modeling, Final Report, Rannoch Corporation, March 1999.
A08	M.L. Wood and R. W. Bush, "Multilateration on Mode S and ATCRBS Signals at Atlanta's Hartsfield Airport", Lincoln Laboratory, M.I.T., January 8, 1998
A09	AERMOD: Description of Model Formulation (Version 02222) EPA 454/R-02-002d, October 21, 2002
A10	FAA INTEGRATED NOISE MODEL, www.faa.gov, current release INM 6.1 (March 4, 2003)
A11	"FLIGHT EXPLORER NEWS: Flight Explorer and Lochard Team to Provide Enhanced Flight Tracking for Cutomers Worldwide", April 28, 2003, http://www.flightexplorer.com/News/press%20releases/pr042803.asp
A12	Source Code received by Rannoch Corp. from FAA, circa 1998.
A13	"A Routine that converts an American Mode S address into its corresponding 'N' number string", Ken Banis, February 17, 1992/
A14	"Description of the U.S. Algorithm for Assigning Mode A Addresses", Robert D. Grappel, M.I.T. Lincoln Laboratory, November 1991
A15	"Program to convert Mode S address to U.S. Tail Number", R.D. Grappel, M.I.T. Lincoln Laboratory, 1991
A16	"Program to convert U.S. aircraft tail numbers to Mode S code", R.D. Grappel, M.I.T. Lincoln Laboratory, 1991

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OTHER ART (including Author, Title, Pertinent Pages, etc.)

A17		"ADSE and Multilateration Mode-S Data Fusion for Location and Identification on Airport Surface", J.G. Herrero J.A. Portas, F.J. Rodriguez, <i>(IEEE 1999 Radar Conference Proceedings, pp.315-320, April 20-22, 1999)</i>
A18		D.C. Rickard, D.J. Sherry, S.J. Taylor, "The development of a prototype aircraft-height monitoring unit utilising an SSR-based difference in time of arrival technique", International Conference Radar 92 (Conf. Publ. No.365), 1992, p 250-3
A19		D. E. Manolakis and C. C. Lefas, "Aircraft geometric height computation using secondary surveillance radar range differences," IEE Proceedings-F, Radar, Sonar, Navigation, Vol 141, No.2, pp.139-148, 1994
A20		REQUEST FOR PROPOSAL for Acquisition of Airport Noise and Operations Monitoring System (NOMS), Indianapolis Airport Authority, October 21, 2003
A21		TECHNICAL SPECIFICATIONS, for a AIRCRAFT FLIGHT TRACK AND NOISE MANAGEMENT SYSTEM for the REGIONAL AIRPORT AUTHORITY OF LOUISVILLE AND JEFFERSON COUNTY Prepared by: Harris Miller Miller & Hanson Inc. 15 New England Executive Park Burlington, MA 01803 HMMH Report No. 298950, May 16, 2003
A22		Application of CNS/ATM Technologies to Airport Management, Alex Smith & Jon Baldwin, Rannoch Corporation, 1800 Diagonal Rd, Suite 430, Alexandria, VA 22314, USA (undated)
A23		"OVERVIEW OF THE FAA ADS-B LINK DECISION", John Scardina, Director, Office of System Architecture and Investment Analysis, Federal Aviation Administration, June 7, 2002.
A24		Automated Correlation of Aircraft Flight Tracks and Events with ATC Data, Alex Smith, Rannoch Corporation, 1800 Diagonal Rd, Suite 430, Alexandria, VA 22314, USA (undated)
A25		"Ground-Based Transceiver (GBT) For Broadcast Services Using the Universal Access Transceiver (UAT) Data Link", FAA-E-2973, Department of Transportation, Federal Aviation Administration, January 15, 2004
A26		"The Future of Alerts ADS-B Seminar", Mark Palm, Thales Melbourne, Thales Air Systems Division, undated.
A27		"Wide Area Multilateration Report on EATMP TRS 131/04 Version 1.0", NLR-CR-2004-472, Roke Manor Research, November 2004
A28		
A29		
A30		
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 (Information Disclosure Statement - Section 9 PTO-1449 (page 5 of 6))

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Examiner: **PHAN, DAO LINDA**

Title: **MINIMUM SAFE ALTITUDE WARNING**

OTHER ART (including Author, Title, Pertinent Pages, etc.)

P01	Protest Letter dated May 16, 2002 from Otto M. Wildensteiner, U.S. Department of Transportation, Washington, DC.
P02	"Comparison of Claims in Application Serial Number 09/971,672 with Prior Art", May 16, 2002, Otto M. Wildensteiner, Department of Transportation, Washington, DC.
P03	"Minimum Aviation System Performance Standards for Automatic Dependent Surveillance Broadcast (ADS-B)", RCTA, Inc. Washington, DC, ©1998
P04	"Runway Incursion Reduction Program Dallas-Ft. Worth Formal Evaluation Report, Final Report", Trios Associates, Inc. December 21, 2000.
P05	"TIS-B DFW Application for Airport Surface Situational Awareness", Trios Associates, Inc., September 6, 2000
P06	"A Prototype Transceiver for Evaluating An Integrated Broadcast Data Link Architecture", Chris Moody & Warrent Wilson, RCTA SC-186, 17 August 1995, RTCA Paper No. 449-95/SC186-033
P07	"The Universal Access Tranceiver (UAT)", Warren Wilson & Chris Moody, May 10, 1995.
P08	"Terminal Area Productivity (TAP) Study Low Visibility Landing and Surface Operations (LVLASO) Demonstration Report" Surface Surveillance Products Team (AND-410) September 4, 1998.
P09	"Phase I - Operational Evaluation FINAL REPORT Cargo Airline Association ADS-B Program, FAA SafeFlight 21 Program" April 10, 2000.
P10	"Capstone Program Plan Version 1.0", Federal Aviation Administration, March 10, 1999.
P11	"TIS-B Concept and Approach", MITRE, Chris Moody, February 29, 2000.
P12	"RTCA Special Committee 186, Working Group 5 ADS-B UAT MOPS Meeting #2, Proposed Contents and Transmission Rates for ADS-B Messages" Chris Moody, MITRE Corp., February 20, 2001.
P13	"AIRBORNE INFORMATION INITIATIVES: CAPITALIZING ON A MULTI-PURPOSE BROADCAST COMMUNICATIONS ARCHITECTURE", R.C. Strain, J.C. Moody, E.C. Hahn, B.E. Dunbar, S. Kavoussi, J.P. Mittelman, Digital Avionics Systems Conference, October 1995.
P14	"Minutes of SC-186 WG-2 (TIS-B) Meeting", 13-14 June 2000
EXAMINER	
DATE CONSIDERED	



PETITION FOR THREE MONTH EXTENSION OF TIME (Small Entity)

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TO THE ASSISTANT COMMISSIONER FOR PATENTS

Applicant herewith petitions the Commissioner of Patents & Trademarks to extend the time for reply to the Office Action dated **April 8, 2005** for **THREE MONTHS** from **July 8, 2005** to **November 8, 2005**.

Small entity status of this application under 37 C.F.R. §§ 1.9 and 1.27 has been established by a verified statement previously submitted.

Submitted herewith is a check in the amount of **\$510** to cover the cost of the extension.

TOTAL FEE DUE (CHECK ENCLOSED)

\$510.00

The Commissioner is hereby authorized to charge any additional fees associated with this communication, including patent application filing fees and processing fees under 37 C.F.R. § 1.16 and 1.17, or credit any overpayment to **Deposit Account No. 50-1393**

Respectfully submitted,

Date: **September 12, 2005**

Robert P. Bell
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